II. AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims of the application.

1. (Previously presented) A database system, for storing and managing data that are used by application programs to execute a specific operation, comprising:

a hierarchical node database wherein data used for said application programs are stored as node data in data records; and

a hierarchical link table, provided for each of said application programs, which comprises relationship data that defines a hierarchical structure of said node data that are stored in said hierarchical node database wherein the hierarchical link table includes effective period data that defines effective periods for the defined hierarchical structure.

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2. (Cancelled).

3. (Previously presented) The database system according to claim 1, wherein said hierarchical node database includes effective period data that define said effective periods for said data records, the effective period data being stored as data entries in individual data fields.

4. (Original) The database system according to claim 3, wherein each of said data records in said hierarchical node database includes a fixed-length column in which only data entries having a constant size are stored, and a variable-length column in which only data having variable sizes are stored.

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5. (Cancelled)

6. (Previously presented) A database system for storing and managing data for use by a plurality of application programs that perform distinct operations, comprising:

a hierarchical node database for storing node data to be used by a first and a second application program;

a first hierarchical link table for defining a first unique hierarchical structure of the node data for use when the first application program is run, wherein the first hierarchical link table includes an identifier that identifies the first application program; and

a second hierarchical link table for defining a second unique hierarchical structure of the node data for use when the second application program is run, wherein the second hierarchical link table includes an identifier that identifies the second application program.

7. (Previously presented) The database system of claim 6, wherein the node database comprises a plurality of data entries, each having a node identifier and a set of node attributes, and wherein the node attributes comprise non-relational data.

8. (Previously presented) The database system of claim 7, wherein the each hierarchical link table includes a set of links that define relationships between parent and child nodes using the node identifiers from the node database.

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9. (Previously presented) The database system of claim 8, wherein each hierarchical link table includes time period fields for each link to optionally establish start and end times for each link.

10. (Previously presented) The database system of claim 7, wherein the each data entry in the node database includes time period fields to optionally establish start and end times for each data entry.

11. (Previously presented) The database system of claim 6, wherein the first application program provides a first monetary rate scheme for a telecommunications provider, and the second application program provides a second monetary rate scheme for the telecommunications provider.

12. (Cancelled).

13. (Previously presented) A database system, for storing and managing data that are used by application programs to execute a specific operation, comprising:

a hierarchical node database wherein data used for said application programs are stored as node data in data records;

a hierarchical link table, provided for each of said application programs, which comprises relationship data that defines a hierarchical structure of said node data that are stored in said

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hierarchical node database wherein the hierarchical link table includes effective period data that defines effective periods for the defined hierarchical structure; and

a cycle control table in which cycle data are entered to define execution timings for said application programs that execute operations at constant time intervals.

14. (Previously presented) The database system according to claim 13, wherein said hierarchical node database includes effective period data that define said effective periods for said data records, the effective period data being stored as data entries in individual data fields.

15. (Previously presented) The database system according to claim 14, wherein each of said data records in said hierarchical node database includes a fixed-length column in which only data entries having a constant size are stored, and a variable-length column in which only data having variable sizes are stored.

16. (Previously presented) A database system, for storing and managing data that is used by a plurality of application programs to execute distinct operations, comprising:

a hierarchical node database, wherein data used for the application programs is stored as node data in data records, and wherein the hierarchical node database includes effective period data for at least one data record that defines a time period when the at least one data record is effective for each of said plurality of application programs;

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a hierarchical link table, provided for each of said application programs, which comprises relationship data that defines a hierarchical structure of the node data that is stored in the hierarchical node database; and

a cycle control table in which cycle data are entered to define execution timings for said application programs that execute operations at constant time intervals.

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